

Heat Injury Prevention

Preventive Medicine Services

SGT Davies

878-4532/2221

Types of Heat Injuries

- Heat Cramps
- Heat Exhaustion
- Heat Stroke

Factors Influencing Heat Injury

- Unacclimatized Personnel
- Overweight & Fatigue
- Heavy Meals & Hot Foods
- Alcohol/Drugs
- Fever
- Tight Clothing

Preventing Heat Injuries

- Replace water
- Avoid excessive salt
- Maintain acclimatization
- Maintain good physical condition
- Establish work/rest schedules
- Wear proper clothing
- Participate in training
- Use WBGT Index

Monitoring

- Conducted 1 May through 30 September
 - Monitored off season based on weather conditions
- Monday through Friday, excluding holidays, 0800-1600, weather permitting
- Results posted on official log and WBGT website updated

Wet Bulb Globe Temperature Monitoring

- Heat Categories -
 - I (78-81.9)
 - II (Green 82 – 84.9)
 - III (Yellow 85 – 87.9)
 - IV (Red 88 – 88.9)
 - V (Black over 90)

FLUID REPLACEMENT GUIDELINES FOR WARM-WEATHER TRAINING

(Average Acclimated Soldier Wearing BDU, Hot-Weather)

Heat Category	WBGT Index	Work/Rest*	Water Per Hour	Work/Rest*	Water Per Hour	Work/Rest*	Water Per Hour
1	78-81.9	No limit	½ quart	No limit	¾ quart	40/20 minutes	¾ quart
2 (Green)	82-84.9	No limit	½ quart	50/10 minutes	¾ quart	30/30 minutes	1 quart
3 (Yellow)	85-87.9	No limit	¾ quart	40/20 minutes	¾ quart	30/30 minutes	1 quart
4 (Red)	88-89.9	No limit	¾ quart	30/30 minutes	¾ quart	20/40 minutes	1 quart
5 (Black)	>90	50/10	1 quart	20/40 minutes	1 quart	10/50 minutes	1 quart

*Rest means minimal physical activity (sitting or standing) and should be accomplished in the shade if possible.
Note 1: The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specified heat category. Individual water needs will vary \pm ¼ quart per hour.
Note 2: CAUTION: Hourly fluid intake should not exceed 1½ quarts per hour.
Note 3: Wearing body armor adds 5°F to WBGT Index
Note 4: MOPP gear adds 10°F to WBGT Index

Easy Work	Moderate Work	Hard Work
<ul style="list-style-type: none">- Walking hard surface at 2.5 mph, \leq 30 pound load- Weapon maintenance- Manual of arm- Marksmanship training- Drill and ceremony	<ul style="list-style-type: none">- Walking hard surface at 3.5 mph, <40-pound load- Walking loose sand at 2.5 mph, no load- Calisthenics- Patrolling- Individual movement techniques, i.e., low crawl, high crawl- Defensive position construction- Field assaults	<ul style="list-style-type: none">- Walking hard surface at 3.5 mph \geq _____ 40 pound load- Walking loose sand at 2.5 mph with load

Note: Soldiers who are overweight, dieting, or past heat casualties are more prone to heat injuries.

Training / Additional Resources

- Training Offered
 - Heat Injury Prevention
 - Calculation of WBGT
- Web-based resources
 - <http://chppm-www.apgea.army.mil/heat>
 - <http://www.eustis.army.mil/wetbulb.asp>

WBGT Hotline

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Environment

Questions

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Preventive Medicine Services

Environmental Health Services

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